CS4

ANTIPSYCHOTIC PATTERNS AND TREATMENT COST IN FRANCE

Riou-França L[1], Westerloppe J[2], Launois R[1]
[1]REES France, Paris, France; [2]Bristol-Myers Squibb, Rueil-Malmaison, France

OBJECTIVES: There is little knowledge about current antipsychotic usage in France. We describe the new trends in prescription and the drug-specific patient profiles. **METHODS:** A cross sectional survey was conducted among a sample of ambulatory and hospital psychiatrists. Psychiatrists registered all schizophrenic patients treated for more than six months during the month of the study (2741 patients). A more detailed questionnaire was then administered for 1861 patients in 3 specific treatment categories. This sampling design allows for a sufficient number of patients within each category. Associations between treatment prescribed and patient characteristics were explored using a generalized logit model. **RESULTS:** Second-Generation Antipsychotics (SGA's) are prescribed as the principal treatment in 62% of the prescriptions. In 78% of prescriptions, only one antipsychotic is prescribed, associations are more common among first-generation antipsychotics (FGA's). Olanzapine is the most prescribed antipsychotic, with a market share of 28%. There is large variability in dosages. The average daily costs of treatment (DCT) range from 3.77€ for olanzapine to 0.14€ for haloperidol. On the whole, the average DCT of a French patient is of 2.26€. Some co-prescriptions are linked to the principal treatment, such as antiparkinsonians (related to a prescription of FGA's), antidepressives (related to risperidone), anxiolytics (related to clozapine) and hypnotics (related to amilsupride). Prescription patterns also vary between ambulatory and hospital psychiatrists; the latter tend to prescribe, among FGA's, more long acting forms and, among SGA's, more clozapine. Ambulatory psychiatrists prescribe more non-long acting FGA's and more amilsupride. **CONCLUSIONS:** Introduction of SGA's in France has modified prescribing patterns. These antipsychotics have a higher DCT. The co-prescriptions vary according to the antipsychotic prescribed as principal treatment, but the design of the study does not allow to conclude whether co-prescriptions are a cause or an effect of the antipsychotic taken.

HEALTH POLICY II

HP5

WHAT HAPPENS WHEN A PHARMACEUTICAL PRODUCT IS REMOVED OUT OF REIMBURSEMENT?

Le Pen C
Aremis Consultants and Paris Dauphine University, Paris, France

For cost-containment reasons, French authorities have decided to remove a large set of pharmaceuticals out of the list of reimbursed products. This decision is controversial and the argument is frequently made that dereimbursed products are largely substituted by reimbursed more expensive drugs, so that no savings actually results from that measure. **OBJECTIVES:** We analyse a preceding case of product dereimbursement to evaluate this argument. **METHODS:** We retrospectively followed a cohort of patients who received a prescription of a product composed of omega3 fatty acids in the indication of hypertriglyceridemy. This drug is no longer reimbursed since September 1998. We collected prescription data before and after the dereimbursement date. A "substitution list" including all drugs that can be thought to be a substitute was established. Finally, all patients were distributed into three groups, the "continuation group" in which patients were still treated, the "discontinuation group" in which patients discontinued their treatment without receiving any product of the substitution list, and the "substitution group" in which patients discontinued the treatment but received at least one prescription from the substitution list. Data came from a well known and reliable physician's panel. **RESULTS:** We received a complete set of data for 1070 patients. The most frequent strategy was the "substitution one" with 41% of patients, 32.5% of patients simply discontinued their treatment and 26.5% continued to take the drug. Statins were the most frequent substitution drugs. Although they were generally more expensive, the monthly average cost per patient was cut by about 20%. The real savings were only 70% of the expected savings because of the substitution strategy. **CONCLUSIONS:** This dereimbursement decision appeared to be a redistributive game in which the winners were health insurance and the statins manufacturers and the losers the manufacturer of the concerned drug and patients whose out-of-pocket payment increased.

HP6

MODELLING USE OF HOSPITAL SERVICES AS A FUNCTION OF NEEDS AND SUPPLY IN ITALY

Petrelli A[1], Picariello R[1], Costa G[2]
[1]Piedmont Region, Grugliasco (TO), Italy; [2]University of Turin, Italy

OBJECTIVES: To evaluate the role of indirect measures of health needs in the use of hospital services. **METHODS:** An ecologic analysis was conducted in Piedmont region (4000,000 inhabitants in North-West of Italy) using municipality aggregated data from the health information system and census population. In order to reduce heterogeneity in dimension of statistical units, the city of Turin (900,000 inhabitants) was disaggregated by neighbourhood (n = 23). Linear hierarchical models were applied to 1.228 statistical units (3528 inhabitants on average) in order to: 1) take into account the clustered nature of the data; 2) estimate residual variability between local health units (LHU). Standardized discharge ratios were used as outcome. Direct and indirect needs measures were taken into account, specifically: standardized mortality ratios (SMR) were used as direct measure of need, while percentages of low educational level, manual work, rented dwelling, dwelling without indoor bathroom, single parent households with children, and immigrated people were used as indirect measures. All the variables were introduced in the model in a standardized form. In order to take into account the supply effect on use of health services, number of hospital beds and distance from the nearest hospital were included. Multicollinearity was evaluated using variance inflation factor estimated by standard multivariate linear regression model. Sensitivity analysis was conducted in order to evaluate the effect of ecologic bias selecting municipality on the basis of demographic dimension. **RESULTS:** A positive significant relationship was found for percentage of low educational level (1.38;95%CI: 0.05–2.71) and percentage of rented dwellings (3.19;95%CI: 1.82–4.57). Statistically significant coefficients were observed for distance (negative) and SMR (positive). Residual significant variability between LHU was observed. **CONCLUSIONS:** These analysis would like to contribute to a needs-based weighted population for capitation purposes in Italy. The role of geographical variability in case-mix and endogeneity in the supply should be better explored.

HP7

STRATEGIES OF PRIORIZATION BASED ON THE SOCIAL WELFARE FUNCTION

Plans-Rubio P
General Direction of Public Health, Barcelona, Spain

OBJECTIVE: The strategy of priorization based on cost-effectiveness has been questioned because equity is not taken into

account. The objective of this study was to develop a strategy of priorization based on the social welfare function (SWF), and to apply this method to decide allocation of resources between smoking cessation therapies and pharmacological treatments of hypercholesterolemia. **METHODS:** The social welfare function relates social welfare to the distribution of health gains between two patient groups, where the exact form depends on parameter ε. The strategy of priorization based on SWF gives a higher priority to treatments associated with values of ε consistent with that from the SWF. Parameter ε of the SWF in Catalonia (Spain) was determined using multiple logistic regression analysis to assess preferences concerning the efficiency-equity trade-off in a group of health managers (n = 140). **RESULTS:** The value of parameter ε obtained was 2.26 (95% CI: 1.07–2.89). This value was consistent with a non-utilitarian SWF. Values of ε obtained for preventive interventions combining different smoking cessation methods for smokers and 20–80 mg/day lovastatin for individuals with hypercholesterolemia ranged from 0 to 2.9 in men and from 0 to 2.4 in women. The intervention using medical advice for smoking cessation in smokers and 20 mg/day lovastatin in individuals with hypercholesterolemia was associated with an ε value of 2.9 in men and 2.4 in women, while interventions using nicotine substation therapies in smokers were associated with values of $\varepsilon < 1.0$ in men and <0.5 in women. **CONCLUSION:** The strategy of priorization based on SWF gives a higher priority to 20–80 mg/day lovastatin for hypercholesterolemia than to nicotine substitution therapies for smokers. The strategy of priorization based on the SWF could give a higher priority to new treatments reducing the difference in health levels between groups of patients.

HP8

EXPLAINING THE LACK OF SUCCESS OF GENERIC DRUGS IN BELGIUM: A POLICY PERSPECTIVE

Simoens S, Laekeman G
Katholieke Universiteit Leuven, Leuven, Belgium

OBJECTIVES: Whereas the market share held by generic drugs exceeded 15% in Germany, UK, and Denmark in 2002, this amounted to 4% in Belgium. This paper purports to review the policy and regulatory environment surrounding generic drugs in Belgium with a view to clarifying its low market share. **METHODS:** The methodology is based on a literature review and analysis of legal texts. **RESULTS:** The low market share held by generic drugs in Belgium principally derives from the absence of incentives for physicians to prescribe and for pharmacists to dispense generic drugs. Although physicians are a major driver of generic drug use through their prescribing behaviour, they have no stake in the decision to prescribe original or generic drugs, and are therefore not cost conscious. Moreover, multiplying the number of drugs containing the same active products confuses the prescribing physician. Belgian pharmacists are not allowed to substitute generic for original drugs and were, until recently, financially penalized for dispensing generic drugs. Additionally, marketing too many essentially similar drugs does not encourage pharmacists to cooperate as their stock gets overloaded. Price regulation has stimulated generic drug use, as the introduction of the reference-based pricing system in 2001 was associated with an increase in market share of reimbursable generic drugs by 3%. However, reference pricing also caused a free fall of prices of original drugs by at least 16%, damaging one of the driving forces of generic prescribing. **CONCLUSIONS:** If policy makers wish to stimulate generic drug use in Belgium, they need to recognize the prime role that physicians and pharmacists play in determining drug use and provide appropriate incentives. Current initiatives that bring together health professionals within local intercollegiate networks and that promote the prescription of drugs using their International Non-Proprietary Name need to be evaluated.